

AMENDED CLAIMS - Version with markings to show changes made

1. (ORIGINAL) An inbred cantaloupe seed designated Inbred 442 wherein a sample of said seed has been deposited under ATCC Accession No. _____.
2. (ORIGINAL) A cantaloupe plant, or parts thereof, produced by growing the seed of claim 1.
3. (ORIGINAL) Pollen of the plant of claim 2.
4. (ORIGINAL) An ovule or ovules of the plant of claim 2.
5. (ORIGINAL) A cantaloupe plant, or parts thereof, having all of the physiological and morphological characteristics of the cantaloupe plant of claim 2.
6. (ORIGINAL) The cantaloupe plant of claim 2, wherein said plant is male sterile.
7. (PREVIOUSLY AMENDED) A tissue culture of regenerable cells of the cantaloupe plant of claim 2.
8. (PREVIOUSLY AMENDED) The tissue culture according to claim 7, selected from the group consisting of protoplasts and calli, wherein the regenerable cells are derived from embryo, protoplasts, meristematic cells, callus, pollen, leaves, anthers, stems, petioles, roots, root tips, fruits, seeds, flowers, cotyledons and hypocotyls.
9. (PREVIOUSLY AMENDED) A cantaloupe plant regenerated from the tissue culture of claim 7 wherein the plant expresses all the morphological and physiological characteristics of inbred cantaloupe line 442, representative seeds having been deposited under ATCC accession number _____.
10. (PREVIOUSLY AMENDED) A method for producing a hybrid cantaloupe seed comprising crossing a first inbred parent cantaloupe plant with a second inbred parent cantaloupe plant and harvesting the hybrid cantaloupe seed produced by crossing said first and second inbred parent cantaloupe plants, wherein said first or second inbred parent cantaloupe plants is the cantaloupe plant of claim 2.
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33. (NEW) A method of producing a transgenic cantaloupe plant comprising transforming the cantaloupe plant of claim 2 with a transgene wherein the transgene confers a characteristic selected from the group consisting of : herbicide resistance, insect resistance, resistance to bacterial disease, resistance to fungal disease, resistance to viral disease, male sterility, increased sweetness, increased flavor, improved ripening control and improved salt tolerance.
34. (NEW) A transgenic cantaloupe plant produced by the method of claim 33.

35. (NEW) A method of producing an herbicide resistant cantaloupe plant comprising transforming the cantaloupe plant of claim 2 with a transgene that confers herbicide resistance.
36. (NEW) An herbicide resistant cantaloupe plant produced by the method of claim 35.
37. (NEW) A method of producing an insect resistant cantaloupe plant comprising transforming the cantaloupe plant of claim 2 with a transgene that confers insect resistance.
38. (NEW) An insect resistant cantaloupe plant produced by the method of claim 37.
39. (NEW) A method of producing a disease resistant cantaloupe plant comprising transforming the cantaloupe plant of claim 2 with a transgene that confers resistance to bacterial, fungal or viral disease.
40. (NEW) A disease resistant cantaloupe plant produced by the method of claim 39.
41. (NEW) A method of producing a male sterile cantaloupe plant comprising transforming the cantaloupe plant of claim 2 with a transgene that confers male sterility.
42. (NEW) A male sterile cantaloupe plant produced by the method of claim 41.
43. (NEW) A method of producing a cantaloupe plant which produces fruits with increased sweetness and flavor, comprising transforming the cantaloupe plant of claim 2 with a transgene that confers increased sweetness and flavor of the fruit.
44. (NEW) A cantaloupe plant which produces fruits who increased sweetness and flavor, said plant produced by the method of claim 43.
45. (NEW) A method of producing a cantaloupe plant with improved ripening control, comprising transforming the cantaloupe plant of claim 2 with a transgene that confers improved ripening control.
46. (NEW) A cantaloupe plant with improved ripening control produced by the method of claim 45.
47. (NEW) A method of producing a cantaloupe plant with improved salt tolerance, comprising transforming the cantaloupe plant of claim 2 with a transgene that confers improved salt tolerance.

48. (NEW) A cantaloupe plant with improved salt tolerance produced by the method of claim 47.
49. (NEW) A method for producing a single gene converted cantaloupe plant comprising backcrossing the cantaloupe plant of claim 2 with another cantaloupe plant wherein the single gene transferred into the cantaloupe plant of claim 2 confers a characteristics selected from the group consisting of: herbicide resistance, insect resistance, resistance to bacterial disease, resistance to fungal disease, resistance to viral disease, male sterility, increased sweetness, increased flavor, improved ripening control and improved salt tolerance.
50. (NEW) A single gene converted cantaloupe plant produced by the method of claim 49.
51. (NEW) A hybrid cantaloupe seed wherein fifty percent of its genome originates from the pollen of claim 3.
52. (NEW) A hybrid cantaloupe seed wherein fifty percent of its genome originates from the ovule of claim 4.